State of Washington
DEPARTMENT OF FISH AND WILDLIFE

Mailing Address: 600 Capitol Way N, Olympia, Washington 98501-1091 - (360) 902-2200

ENVIRONMENTAL CHECKLIST

(WAC 197-11-960)

A. BACKGROUND

1. Name of proposed project, if applicable: Chimacum Creek Estuary Restoration Project

2. Name of Applicant: Washington Department of Fish and Wildlife

3. Address and phone number of applicant and contact person:

Washington Dept. of Fish and Wildlife
Capital Programs & Engineering Division
600 Capitol Way North
Olympia, WA 98501-1091

Contact Person: Curtis Wambach,
Fish & Wildlife Biologist/Permit Specialist
Telephone Number: (360) 902-8426
Fax Number: (360) 902-8367
E-Mail: wambacjw@dfw.wa.gov

4. Date checklist prepared: February 24, 2004. Revised April 2, 2004.

5. Agency requesting checklist: Washington Department of Fish and Wildlife

6. Proposed timing or schedule (including phasing, if applicable):

Begin construction March 2004
Complete by September 2005

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

No.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal:

Jerome Morrissette & Associates Inc., (JWM & A), July 9, 2003, *Chimacum Estuary Nearshore Restoration Project Slope Stability Evaluation.*

Phillips, R. S., October 31, 2003, *Technical Memorandum: Chimacum Creek Estuary Restoration Project, Port Townsend Bay, Irondale, Washington*, Coast & Harbor Engineering.

The North Olympic Salmon Coalition (NOSC), a Regional Fisheries Enhancement Group, commented on the possibility of monitoring vegetation growth to prevent invasive weeds from colonizing a 'berm' that could possibly form on the beach over time. The technical memorandum prepared by Coast and Harbor Engineering suggested that wave action and sediment recruited from the upper beach could possibly form a berm on the lower beach. It is not known with certainty that this berm would or would not develop. WDFW would address the problem of invasive weeds forming on the berm if the berm occurs, and if invasive weeds begin to develop on the possible berm.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

WDFW has applied to Jefferson County to vacate the unplatted segment of East Moore Street on the proposal site.

10. List any government approvals or permits that will be needed for your proposal, if known.

Jefferson County Shoreline Permit
Jefferson County Stormwater Management Permit
U.S. Army Corps of Engineers Permit
Hydraulic Project Approval (HPA) from WDFW

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page.

The proposed Chimacum Creek Estuary Project work consists of performing intertidal and nearshore habitat restoration within Port Townsend Bay for the improvement of habitat for shellfish, forage fish, and salmon. The scope of the proposed work includes the removal of an existing rock bulkhead, excavation and re-grading of nearshore fill, and placement of large woody debris.

Approximately 21,000 cubic yards of nearshore fill and waste wood material located in the upper layer of soil will be hauled offsite to an approved waste facility. After the upper layer of soil has been removed, approximately 43,880 cubic yards of clean granular sediment will remain. It will be re-graded to a natural slope toward the beach, with the excess clean material placed along the existing bluff to serve as a "recruitment berm." The recruitment berm will provide a long-term source of marine sediment to the beach, allowing estuarine landforms to develop over time. The amount of material excavated will total 65,000 cubic yards.

The goal of the project is to improve shoreline habitat conditions for migrating juvenile salmonids, including ESA listed Hood Canal summer chum and Puget Sound chinook. In addition, we expect benefits to habitat for other natural resources (e.g., forage fish & shellfish) from this project.

Elements of this project are to:

- Remove the nearshore fill to restore the nearshore area to its original predevelopment condition
- Road abandonment
- Remove power line and poles
- Remove a concrete shed

- Preserve old dilapidated wooden jail building (*Circa* 1890s)
- Construct protection berm around neighboring property to prevent erosion on that property

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The Chimacum Creek Estuary Restoration Project site is located on WDFW owned waterfront property at the southwestern end of Port Townsend Bay near the community of Irondale, Washington, Section 35, Township 30 North, Range 1 West, W.M. The WDFW property extends along the shore parallel from approximately 200 feet south of East Moore Street, north to the Chimacum Creek outlet. The property extends in the cross-shore direction from the tidelands shoreward up to the nearshore bluff or a width of approximately 500 feet. The property located to the south is owned by Jefferson County and is the site of a County Park.

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site (underline one): flat, rolling**, hilly, steep slopes, mountainous, other_____.** (Other areas of site designated as steep slopes)

b. What is the steepest slope on the site (approximate percent slope)?

<10 percent, other than the escarpment, which is about 30 percent.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of the agricultural soils, specify them and note any prime farmland.

Coarse sand and gravel fill material.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

The shoreline of the proposal site and Jefferson County's adjacent park property has been subject to erosion from wave action. A Coastal Engineering Study was prepared by Coast and Harbor Engineering (October 31, 2003) to evaluate whether the removal of the riprap and fill on the proposal site could affect the stability of the shoreline on the adjacent shorelines, including the Jefferson County property. Coast and Harbor Engineering (2003) performed a baseline assessment of the beach and an analysis of the anticipated effects on beach dynamics after completion of the proposal. This information was submitted to the County during a March 31, 2004 meeting at the Jefferson County Planning and Permit Center. Coast and Harbor Engineering (2003) concluded that the "site has a stable shoreline." Also, the project calls for an erosion barrier consisting of a buried boulder wall to provide additional shoreline stability on adjacent properties, including private property and the County's adjacent park property (see attached Drawing Sheet 4 of 6 - Riprap Trench). This wall structure will be buried, and therefore not visible to the eye.

e. Describe the purpose, type and approximate quantities of any filling or grading proposed.

Indicate source of fill.

The purpose of the project is to restore the Chimacum Creek Estuary and shoreline to predevelopment conditions for the improvement of habitat for shellfish, forage fish, and salmon. In order to achieve this restoration, 1) 21,119 cubic yards of fill material and wood waste left onsite from the historical mill plant would be excavated and hauled offsite; 2) 43,880 cubic yards of clean marine sediment would be re-graded with excess material placed along the existing bluff to serve as a "recruitment berm;" and 3) existing structures, such as an old shed, county road, and power poles would be removed from the site. The recruitment berm would be placed at the base of the onsite escarpment. Clean marine sediment would slowly recruit to the beach and estuary from the recruitment berm to form a more natural beach profile over time.

f. Could erosion occur as a result of clearing, construction or use? If so generally describe.

No. No appreciable vegetation would be cleared from the sparsely vegetated coarse sandy fill material that occurs on the site. BMPs would be implemented to minimize turbid runoff to the estuary. A berm would remain in place at MHW between the excavation and the estuary waters to separate the excavation work from the waters of the estuary.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

None.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

A berm left in place at MHW to separate the excavation from the waters of the estuary. Straw bales may be placed in onsite drainages and a silt fence may be installed in areas if necessary. BMPs will be applied to avoid sediment on roads from heavy equipment traffic. WDFW is applying for a Stormwater Management Permit from Jefferson County to allow the county to participate in evaluating and improving proposed measures to circumvent impacts related to erosion.

2. Air

a What type of emissions to the air would result from the proposal (i.e., dust automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

Some temporary emissions would occur associated with construction equipment operation. Emissions may be slightly above background levels during construction. There will not be any emissions when project is complete.

b. Are there any offsite sources of emissions or odor that may affect your proposal? If so, generally describe.

None.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

Mufflers will be standard on all heavy construction machinery used in this project.

3. WATER

a. Surface

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes ponds or wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

Port Townsend Bay and Chimacum Creek Estuary.

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

The project will require work within 200 feet of the water. No work will occur below MHW.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

None.

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

No.

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

No.

6) Does the proposal involve any discharges of waste material to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No.

3. WATER

b. Ground

1) Will groundwater be withdrawn, or will water be discharged to groundwater? Give general description purpose, and approximate quantities, if known.

No.

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

None.

3. WATER

c. Water Runoff (including storm water):

1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (including quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Jefferson County has conducted a drainage analysis and water quality sampling within the vicinity of the project site for the Draft Irondale and Port Hadlock Urban Growth Area Stormwater Management Plan. A drainage that bisects the southern portion of the proposal site is included in the study. Stormwater runoff from this drainage flows across the southerly portion of the proposal site in a culvert and ditch, and discharges to Port Townsend Bay. WDFW proposes to provide an open vegetated swale, planted with willow and grasses, to provide some water quality benefit and prevent direct discharge to marine waters, as recommended by Jefferson County during the March 31, 2004 meeting.

2) Could waste materials enter ground or surface waters? If so, generally describe.

No.

d. Proposed measures to reduce or control surface, ground and runoff water impacts, if any:

Berm at water's edge will separate waters of the estuary from onsite runoff. Site runoff will pool behind the berm and infiltrate in the sandy substrate.

WDFW would create a vegetated swale to provide some water quality benefit for stormwater runoff generated from properties located southwest of the project site and to prevent direct discharge of this runoff to marine waters (see Drawings – Sheet 4 of 6).

4. PLANTS

a. Check or underline types of vegetation found on the site:

___ **deciduous tree: On periphery of site--no clearing; alder, maple, aspen, other**

Trees on bluff.

___ **evergreen tree: On periphery of site--no clearing; fir, cedar, pine, other:**

Trees on bluff.

_X_ **shrubs: On periphery of site--no clearing; Himalayan blackberry, scotch broom**

_X_ **grass onsite** According to Jefferson County, some beach grass has colonized areas adjacent to the Ordinary High Water Mark (OHWM).

___ **pasture**

___ crop or grain

___ wet soil plants: cattail, buttercup, bulrush, skunk cabbage, other

___ water plants: waterlily, eelgrass, milfoil, other

__ other types of vegetation

b. What kind and amount of vegetation will be removed or altered?

Himalayan blackberry, scotch broom, and other invasive weed species that dominate the vegetative community on the project site would be removed. Some beach grass that has colonized the Ordinary High Water line would also be removed. We hope to partner with local enhancement groups to replant beach grass during restoration.

c. List threatened and endangered species [of plants] known to be on or near the site.

None, based on the Department of Natural Resources Natural Heritage Database.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

Plant native willow and install grasses in proposed water quality improvement swale. Allow for the natural recruitment and establishment of intertidal and marine shoreline vegetation on the onsite restored beachfront.

5. ANIMALS

a. Underline any birds or animals, which have been observed on or near the site or are known to be on or near the site:

Birds: hawk, heron, eagle, songbirds, other: Waterfowl.

Mammals: deer, bear, elk, beaver, other: River otter.

Fish: bass, salmon, trout, herring, shellfish, other:

b. List any threatened or endangered species known to be on or near the site.

Two bald eagle nests (alternate nests of the same breeding pair) are documented to occur 1 3/4 miles north of the subject property. The bald eagle is federally threatened under the Endangered Species Act. Federally threatened summer run chum salmon occur in the estuary and in Chimacum Creek. Federally threatened chinook salmon could occur in the vicinity of the project site. Sand lance and other forage fish may spawn at the beach or rear in the estuary. Because no work is planned for below MHW and because BMPs will be implemented during the project work, no adverse effect to listed fish species, forage fish, or essential fish habitat is anticipated as a result of construction activities. The purpose of the project is to enhance fish habitat on the subject property.

c. Is the site part of a migration route? If so, explain.

No.

d. Proposed measures to preserve and enhance wildlife, if any:

The purpose of the project is to restore estuarine habitat for fish and wildlife habitat.

6. ENERGY AND NATURAL RESOURCES

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

None.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

None.

7. ENVIRONMENTAL HEALTH

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill or hazardous waste that could occur as a result of this proposal?

No.

1) Describe special emergency services that might be required.

None.

2) Proposed measures to reduce or control environmental health hazards, if any:

Haul offsite any creosote timber or other potentially hazardous material if uncovered during onsite excavation. Dispose of any hazardous material at approved dumpsite.

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

None.

2**) What types and levels of noise would be created by or associated with the project on a short-term or long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.**

Short-term noise associated with restoration activities will be limited to normal daytime working hours. No long-term noise impacts will occur.

3) Proposed measures to reduce or control noise impacts, if any:

Construction equipment will be fitted with mufflers to reduce noise.

8. LAND AND SHORELINE USE

a. What is the current use of the site and adjacent properties?

Beach walking, fishing, crabbing, shellfish harvest, swimming, hunting, small boat launching, picnicking, bird watching, nature, study, and some unauthorized recreational activities such as camping, ORV, and 4-wheel drive activities.

b. Has the site been used for agriculture? If so describe?

No.

c. Describe any structures on the site.

Dilapidated concrete shed and old dilapidated jailhouse.

d. Will any structures be demolished? If so what?

Dilapidated concrete shed.

e. What is the current zoning classification of the site?

Rural residential 1:5.

f. What is the current comprehensive plan designation of the site?

One dwelling unity per 5 acres.

g. If applicable, what is the current shoreline master program designation of the site?

Fish and Wildlife Habitat Area.

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.

Yes, estuary and marine shoreline.

i. Approximately how many people would reside or work in the completed project?

None.

j. Approximately how many people would the completed project displace?

None.

k. Proposed measures to avoid or reduce displacement impacts, if any:

None.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

The project site will be protected as fish and wildlife habitat. Project site will remain accessible to the public for passive recreational use.

9. HOUSING

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

None.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

None.

c. Proposed measures to reduce or control housing impacts, if any:

None.

10. AESTHETICS

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

None.

b. What views in the immediate vicinity would be altered or obstructed?

None.

c. Proposed measures to reduce or control aesthetic impacts, if any:

None.

11. LIGHT AND GLARE

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

None.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

No.

c. What existing off-site sources of light or glare may affect your proposal?

None.

d. Proposed measures to reduce or control light and glare impacts, if any:

None.

12. RECREATION

a. What designated and informal recreational opportunities are in the immediate vicinity?

The proposal site is used for recreation on a daily basis. Jefferson County is developing a community park immediately south of the proposal site. The following recreational activities that occur on the site and in the immediate vicinity include beach walking, fishing, crabbing, shellfish harvest, swimming, hunting, small boat launching, picnicking, bird watching, nature study, and some unauthorized recreational activities such as camping, ORV, and 4-wheel drive activities.

b. Would the proposed project displace any existing recreational uses? If so, describe.

Small boat launching may be hindered on the project site; however, this activity would be allowed to continue on the adjacent County Park property. Existing unauthorized recreational activities such as camping, ORV, and 4-wheel drive ORV would be discouraged. Visitors to the subject property and the County's adjacent park property currently can physically drive onto and park on the subject property. No vehicle access would be allowed in the restored beach and estuary area subsequent to beach and estuary restoration. The County has some concerns regarding the loss of parking on the subject property (addressed below in letter 'c').

c. Proposed measures to reduce or control impacts on recreation, including recreational opportunities to be provided by the project or applicant, if any:

At the request of Jefferson County, WDFW would allow some informal parking on the unimproved southernmost portion of the subject property located adjacent to the park property. This would provide some remedy to the County's loss of parking area. This area is not included in the estuary restoration project. At the County's request, WDFW would also allow a sign to designate a passive vehicle turnaround area in this location. No improvements or restoration activities are proposed for this area.

13. HISTORIC AND CULTURAL PRESERVATION

a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.

The proposal site is part of the Irondale National Historic District designated by the National Park Service. The Irondale Steel and Iron Works site, which is on the adjacent Jefferson County Park, is listed and documented in the National Park Service Historic American Engineering Record. The Irondale Jail on the proposal site is listed as a National Historic District.

b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.

Remains of the Irondale Jail are on the proposal site. A concrete bank vault from the Irondale National Historic District is adjacent to the south boundary of the proposal site. Some homes on Moore Street adjacent to the site are conversions of historic commercial buildings. Extensive industrial artifacts are located on the adjacent Jefferson County Park site. The area at and adjacent to the mouth of Chimacum Creek was inhabited by Native Americans, including the Chimacum and Snohomish Tribes.

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c. Proposed measures to reduce or control impacts, if any:

No adverse impacts to the Irondale jailhouse or bank vault, homes along Moore Street, or industrial artifacts are expected to occur as a result of this project. The jailhouse or houses along Moore Street will not be physically disturbed as part of this project. Since the Historic Irondale Steel and Iron Works site is located on the adjacent Jefferson County Park, no adverse impacts to industrial artifacts are expected. If Native American cultural resources are found during the project work, the work will be halted immediately and tribal authorities will be notified.

14. TRANSPORTATION

a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.

Irondale Road to 4th Street to Moore Street.

b. Is site currently served by public transit? If no, what is the approximate distance to the nearest transit stop?

The subject property is not directly served by public transit. The nearest transit stop is on Jefferson Transit Route #6 at Fourth Street and Irondale Road, approximately 1200 feet from the site.

c. How many parking spaces would the completed project have? How many would the project eliminate?

There are a large number of informal parking spaces on the proposal site that would be eliminated.

d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).

No.

e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

No.

f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

Jefferson County records indicate that current off-peak (October) traffic volumes at the easterly end of the platted segment of East Moore Street have been measured at 45-50 vehicles per day. Some of the traffic is recreational, heading to either the subject property or the County Park property, and some of this traffic may be residential, heading to the surrounding residential neighborhood. The County did not distinguish between the different traffic destinations. The restoration project may encourage visitors interested in passive recreational opportunities to the project vicinity. The restoration project will likely also decrease traffic related to unauthorized activities (e.g. off-road use). WDFW will eliminate road access to the estuary restoration site and no formal pedestrian access will be established. Only passive pedestrian access will be allowed on the property. WDFW expects to continue to work with Jefferson County regarding integration of the adjacent park improvements and recreational opportunities with the restoration project.

Jefferson County indicates that peak volumes occur during the 4th of July weekend.

g. Proposed measures to reduce or control transportation impacts, if any:

The County has expressed concerns that additional traffic generated by the combined WDFW and County projects and that elimination of informal (unregulated) parking on the WDFW site will result in the need for additional parking spaces at the adjacent Jefferson County Park. As addressed in Section 12 - Recreation (c): *"At the request of Jefferson County, WDFW would allow some informal parking on the unimproved southernmost portion of the subject property located adjacent to the park property. This would provide some remedy to the County's loss of parking area. This area is not included in the estuary restoration project. At the County's request, WDFW would also allow a sign to designate a passive vehicle turnaround area in this location. No improvements or restoration activities are proposed for this area."*

15. PUBLIC SERVICES

a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so generally describe.

The County has expressed concerns that the estuary restoration project would increase the public recreational use of the site and the adjacent Jefferson County park property. WDFW does not believe that the estuary restoration project will notably increase the need for public services on the WDFW property over existing conditions. The proposed estuary restoration project is expected to reduce the need for public services over the existing conditions. WDFW will eliminate road access to the estuary restoration site and no formal pedestrian access will be established. Only passive pedestrian access will be allowed on the property.

The adjacent County Park future improvements are expected to generate a greater need for public services. However, WDFW is willing to work closely with the County to form an agreement to support Jefferson County's provision of public services that will serve the WDFW site.

b. Proposed measures to reduce or control direct impacts on public services, if any:

As stated above, WDFW is willing to work closely with the County to form an agreement to support Jefferson County's provision of public services that will serve the WDFW site.

16. UTILITIES

a. Underline utilities currently available at the site: Electricity, Natural Gas, Water, Refuse Service, Telephone, Sanitary Sewer, Septic System, Other.

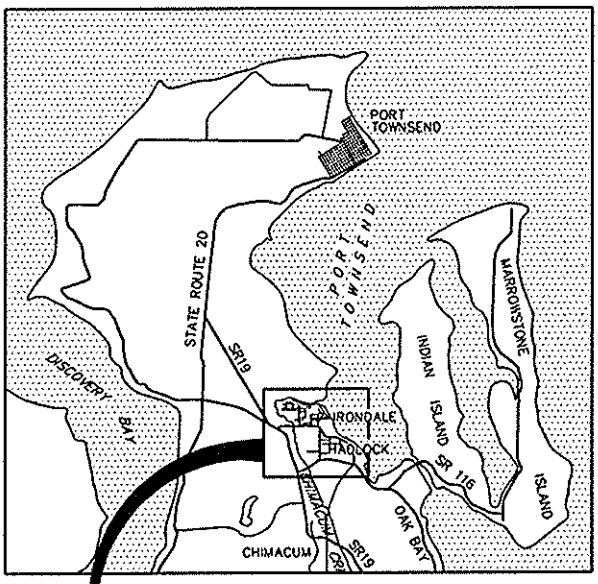
b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity, which might be needed.

Existing utilities (water, power) have been disabled. Waterline will be cut and capped; power poles and lines will be removed.

C. SIGNATURE

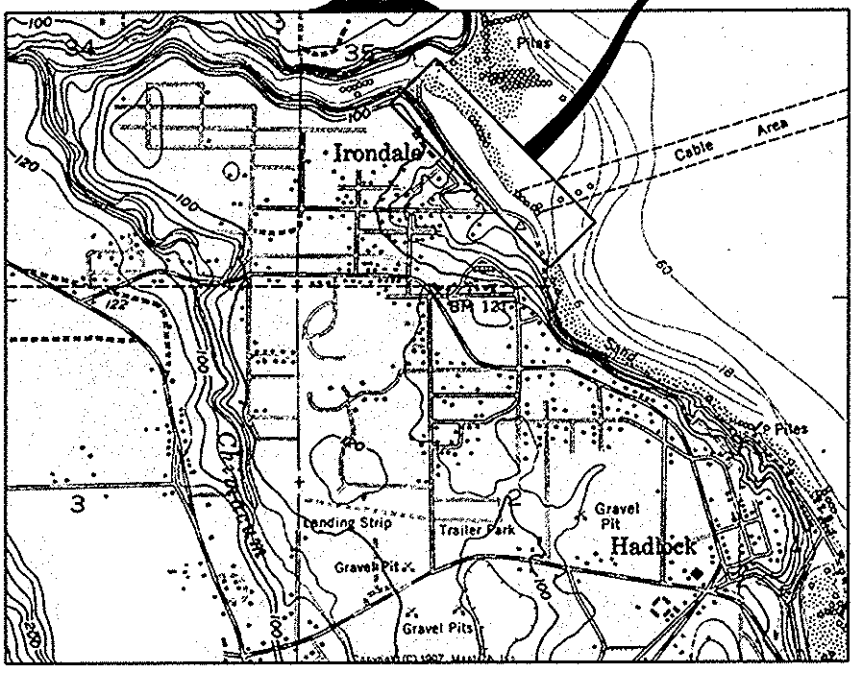
The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

SIGNATURE:*Original signature on file at SEPA Center* DATE SUBMITTED: April 14, 2004



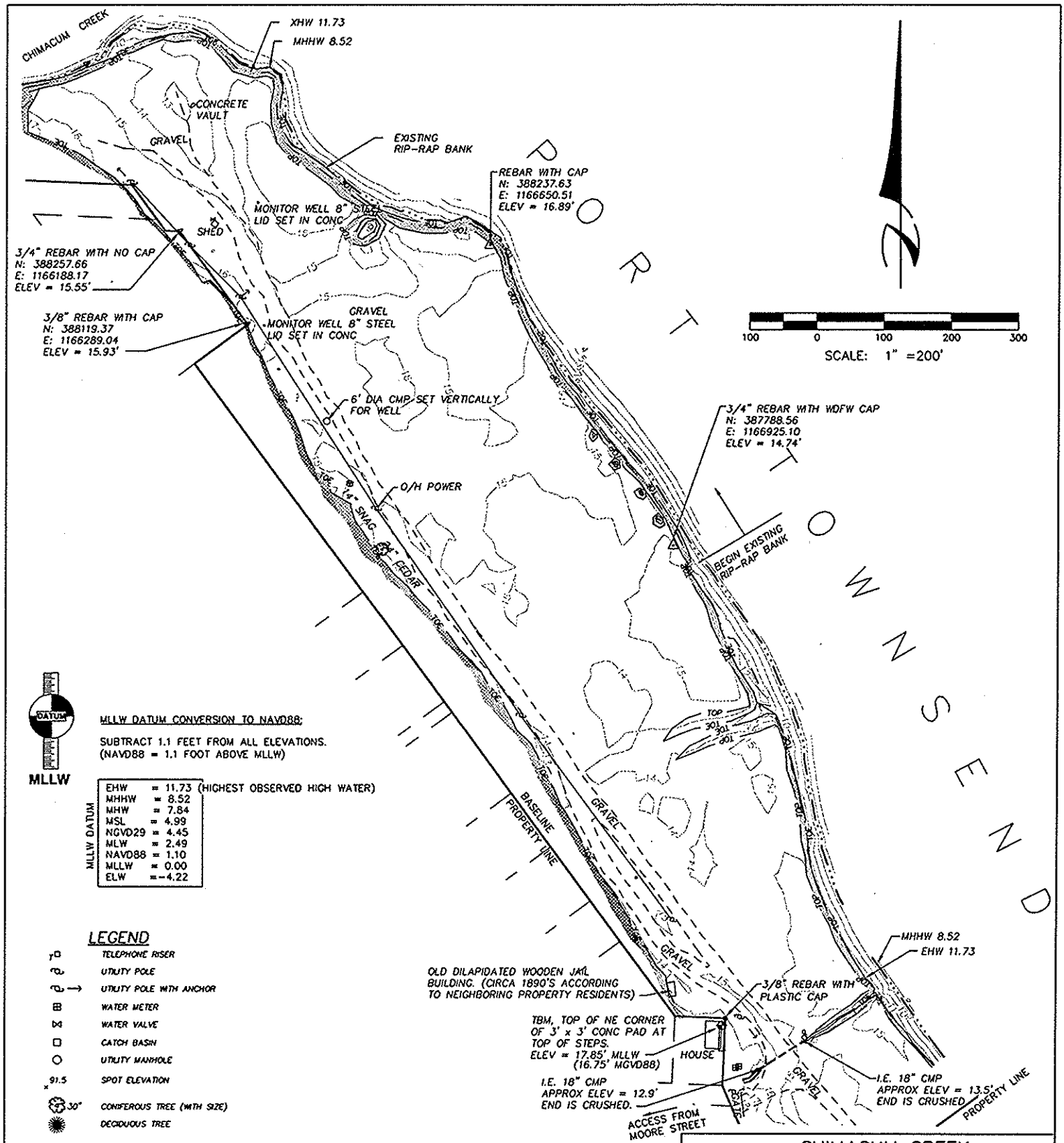
JEFFERSON COUNTY

PROJECT LOCATION



VICINITY MAP
SCALE: NONE

PURPOSE: ESTUARY RESTORATION		PROPOSED: ESTUARY RESTORATION VICINITY MAP
DATUM: MLLW LATITUDE: N 48°02'52" LONGITUDE: W 122°42'10" ENG. PROJECT NO. JN: M: 03-1	SITE: CHIMACUM CREEK ADDRESS: MOORE STREET IRONDALE, WA WASHINGTON DEPT. of FISH & WILDLIFE 600 CAPITAL WAY N. OLYMPIA, WA 98501-1091	IN: PORT TOWNSEND NEAR: CHIMAKUM CREEK COUNTY OF: JEFFERSON STATE: WA PORTION OF: SEC. 35, T. 30N, R. 1W DATE: 01/12/2004 SHEET 1 OF 6



VERTICAL DATUM

SURVEYED NAVD 88, DERIVED FROM GPS OBSERVATIONS
CONVERTED TO MLLW (SEE DATUM NOTE)

BASIS OF BEARINGS

NAD 83/1991, FROM GPS OBSERVATIONS

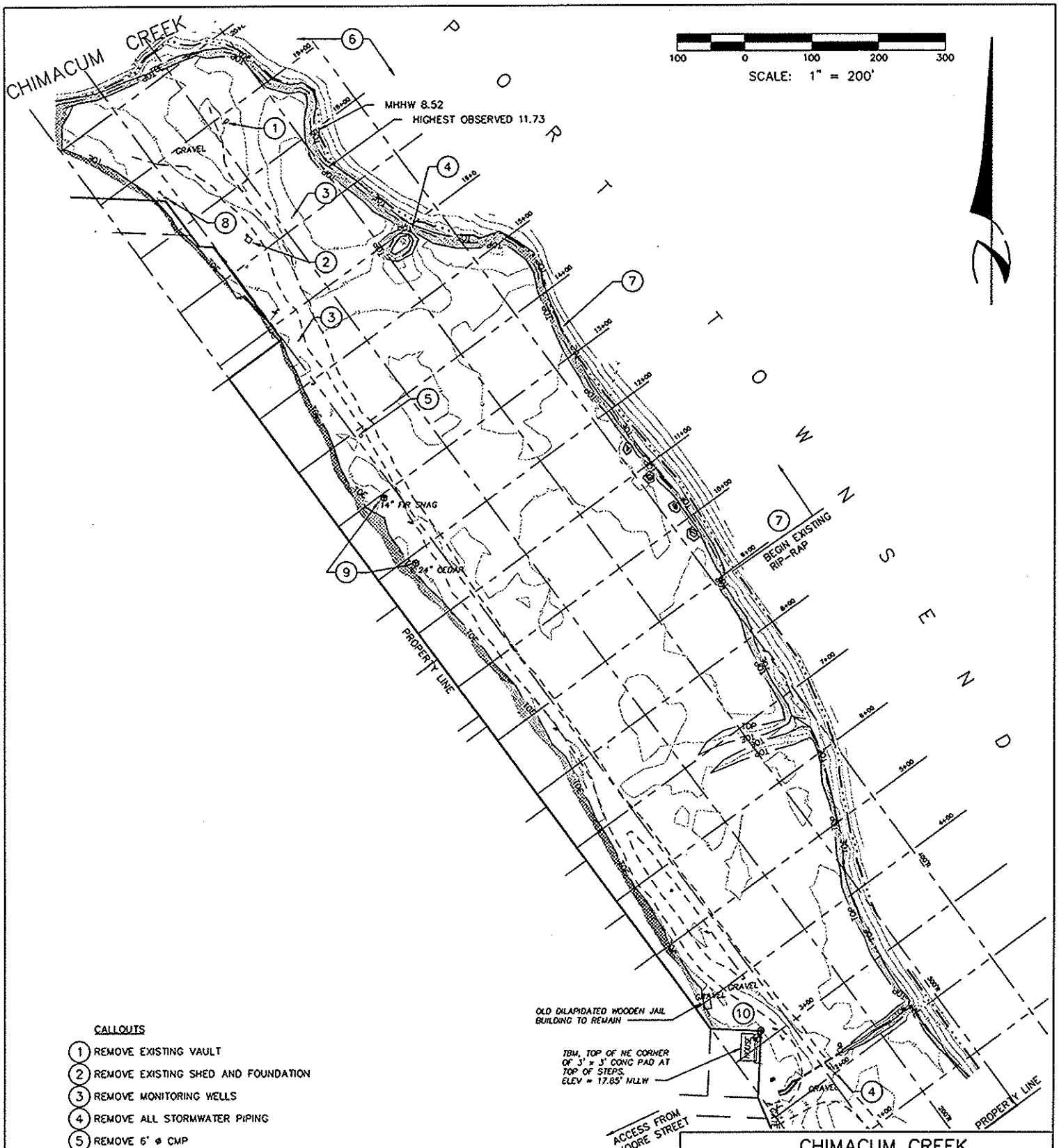
DISCLAIMER
THIS IS NOT A BOUNDARY SURVEY. THIS MAP IS INTENDED FOR USE AS TOPOGRAPHICAL MAP ONLY.

CHIMACUM CREEK
ESTUARY RESTORATION
EXISTING SITE PLAN

WASHINGTON DEPT. of FISH & WILDLIFE
600 CAPITAL WAY N.
OLYMPIA, WA 98501-1091

ENG. PROJECT NO. JN: M: 03-1

DATE: 1/12/2004 SHEET 2 OF 6



CALLOUTS

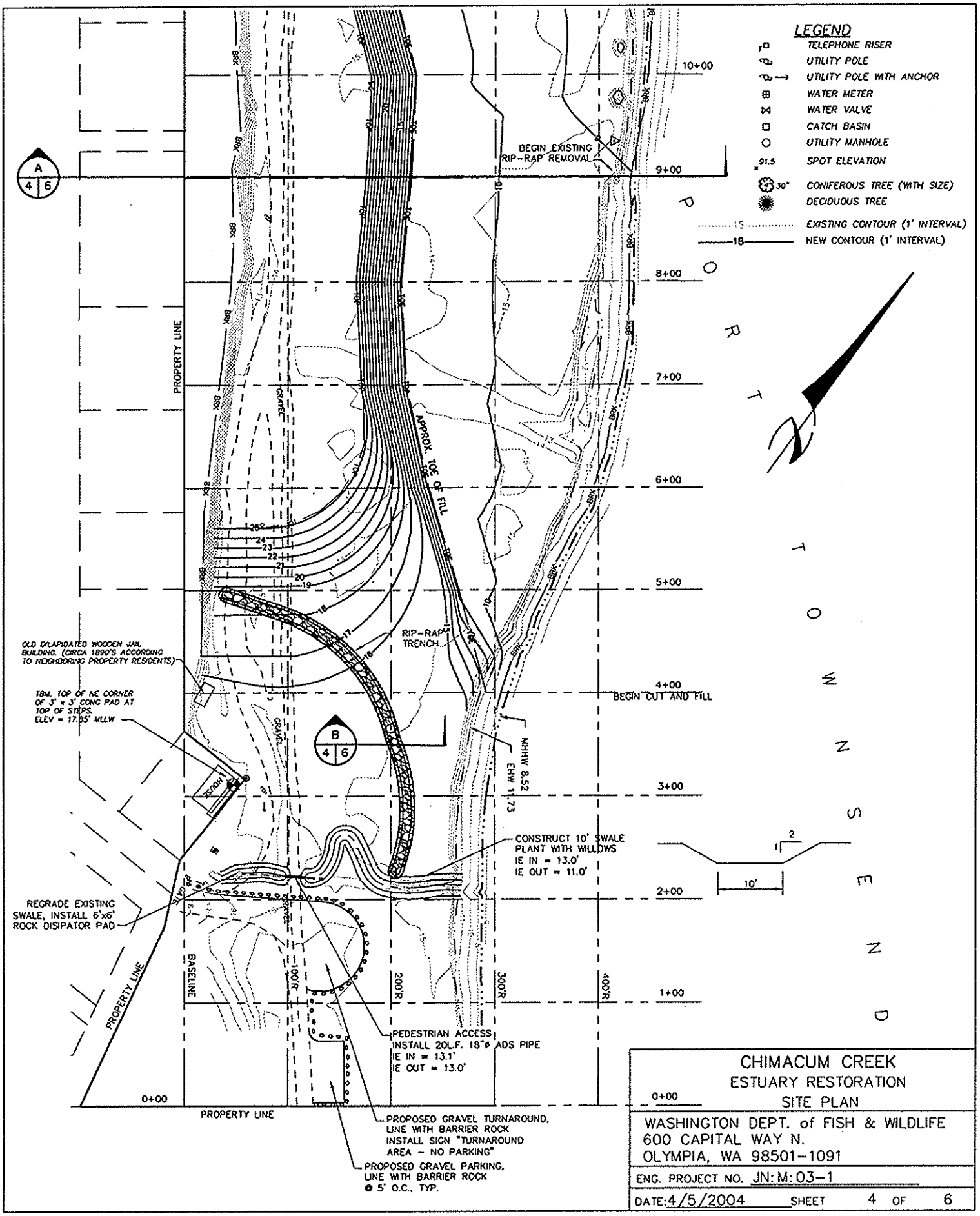
1. REMOVE EXISTING VAULT
2. REMOVE EXISTING SHED AND FOUNDATION
3. REMOVE MONITORING WELLS
4. REMOVE ALL STORMWATER PIPING
5. REMOVE 6" ø CMP
6. REMOVE DEBRIS IN TIDAL ZONE (INCLUDING TREATED AND DIMENSIONAL WOOD, METAL DEBRIS, ETC.). LEAVE DRIFT LOGS.
7. REMOVE RIP-RAP. RELOCATE TO RIP-RAP TRENCH
8. REMOVE OVERHEAD UTILITY AND POLES (BY OTHERS)
9. ALL TREES OVER 6" IN DIAMETER. INSTALL TEMPORY FENCE TO PROTECT DURING CONSTRUCTION.
10. ABANDON EXISTING WATERLINE. CUT AND CAP.

CHIMACUM CREEK
ESTUARY RESTORATION
DEMOLITION PLAN

WASHINGTON DEPT. of FISH & WILDLIFE
600 CAPITAL WAY N.
OLYMPIA, WA 98501-1091

ENG. PROJECT NO. JN: M: 03-1

DATE: 01/12/2004 SHEET 3 OF 6

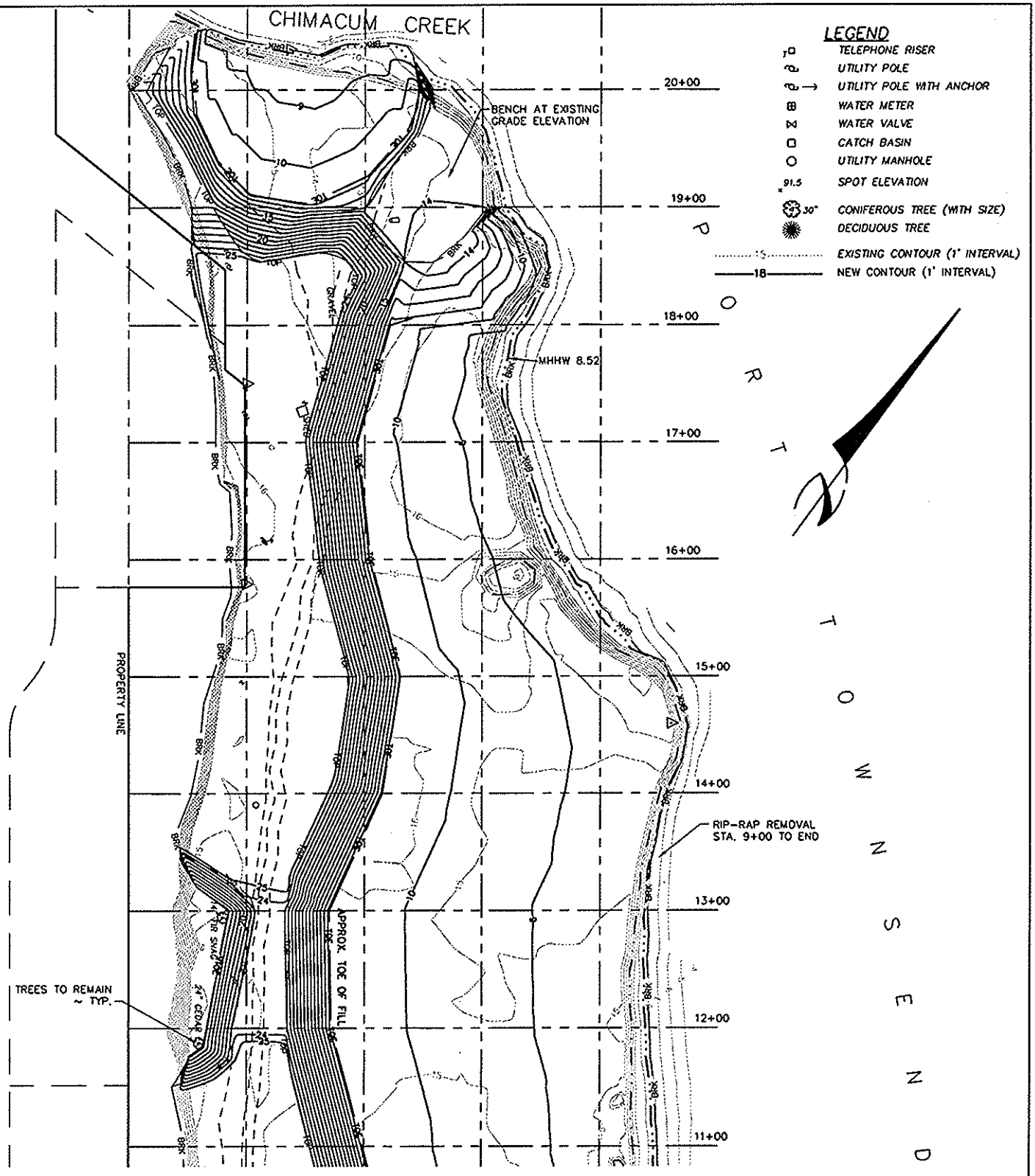


CHIMACUM CREEK
ESTUARY RESTORATION
SITE PLAN

WASHINGTON DEPT. of FISH & WILDLIFE
600 CAPITAL WAY N.
OLYMPIA, WA 98501-1091

ENG. PROJECT NO. JN: M: 03-1

DATE: 4/5/2004 SHEET 4 OF 6



CHIMACUM CREEK
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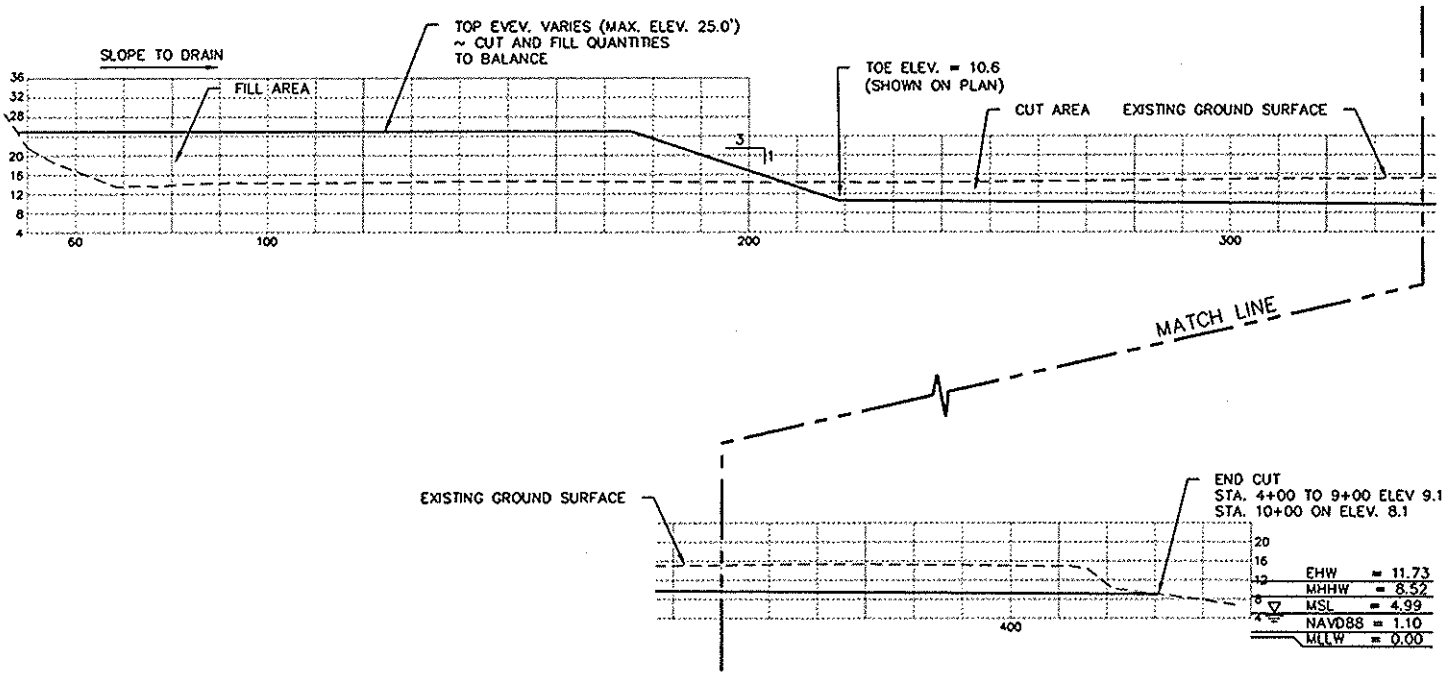
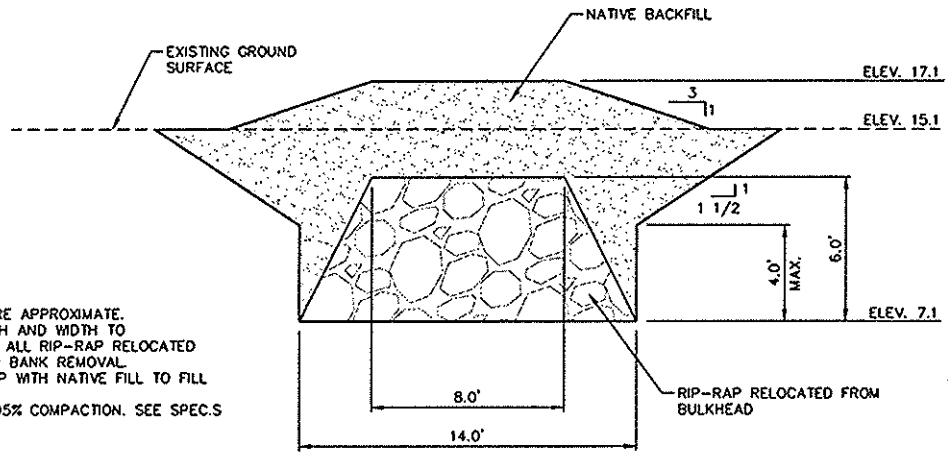
ENG. PROJECT NO. JN: M: 03-1

DATE: 01/12/2004 SHEET 5 OF 6



TYPICAL SECTION (A / 4 | 6)
SCALE: 1" = 40'



TRENCH NOTES:

1. ELEVATIONS ARE APPROXIMATE.
2. TRENCH LENGTH AND WIDTH TO ACCOMMODATE ALL RIP-RAP RELOCATED FROM RIP-RAP BANK REMOVAL.
3. LAYER RIP-RAP WITH NATIVE FILL TO FILL VOIDS.
4. COMPACT TO 95% COMPACTION. SEE SPEC.S

TYPICAL SECTION (B / 4 | 6)
SCALE: 1" = 8'

CHIMACUM CREEK
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ENG. PROJECT NO. JN: M: 03-1

DATE: 01/12/2004 SHEET 6 OF 6

e. **Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.**

No.

f. **How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.**

None.

g. **Proposed measures to reduce or control transportation impacts, if any:**

None.

15. PUBLIC SERVICES

a. **Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so generally describe.**

No.

b. **Proposed measures to reduce or control direct impacts on public services, if any:**

None.

16. UTILITIES

a. **Underline utilities currently available at the site: Electricity, Natural Gas, Water, Refuse Service, Telephone, Sanitary Sewer, Septic System, Other.**

b. **Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity, which might be needed.**

None.

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

SIGNATURE: _____ **DATE SUBMITTED:** 3/4/04